Introduction to GIS

through Quantum GIS

Day 4: Map Day

offered by Valley Stewardship Network

taught and prepared by Legion GIS, LLC

July 2016

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through Quantum GIS

Day 4: Also, Recap Day

offered by Valley Stewardship Network

taught and prepared by Legion GIS, LLC

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Recap of the last 3 sessions…

About GIS…

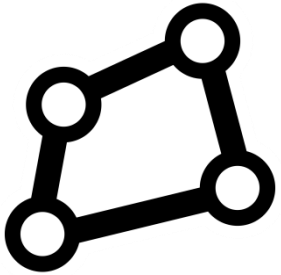
data *processing* *publishing*

- Generally, the GIS field contains all of these
- More specifically, the "processing" (my term) corresponds more directly with a "Geographic Information System"

Some technical aspects of spatial data…

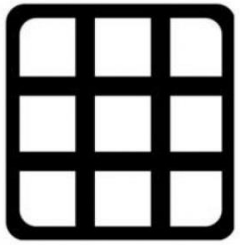
- *Spatial* means that coordinates are included
- Two general categories of spatial data

Vector



Store geometric "features"
Roads, Park Boundaries, Streams
Shapefiles (.shp)

Raster



Contain cells with unique values
Aerial Imagery, Digital Elevation Model
TIFF or GeoTIFF (.tif)

Coordinate Reference Systems…

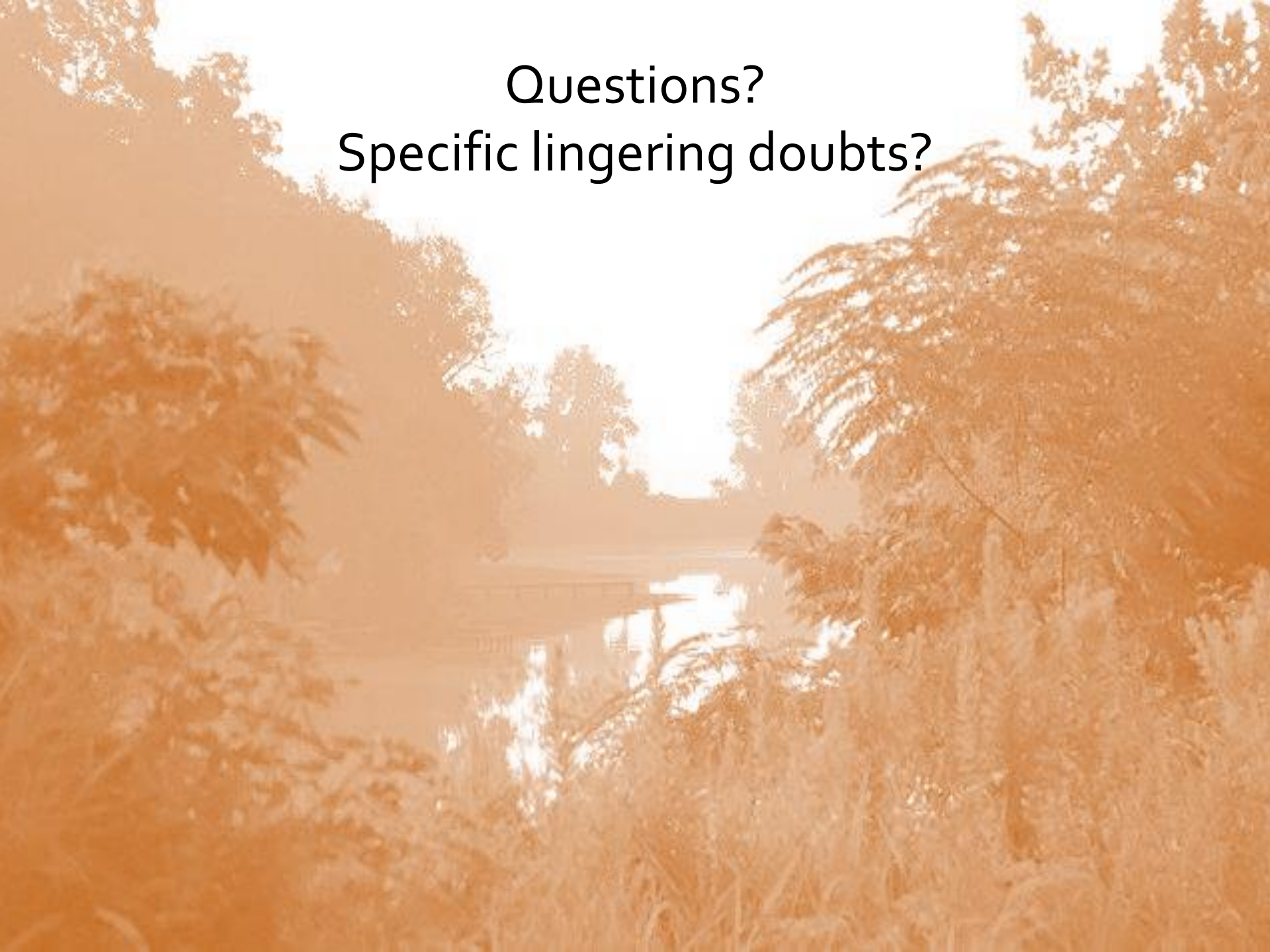
- Used to correctly interpret the coordinates in a spatial dataset.

Geographic Coordinate System
Uses latitude/longitude coordinates
Based on a "datum" (NAD83, etc.)

Projected Coordinate System
Uses a projection to interpret x,y coordinates
The projection is also based on a datum
UTM Zones, State Plane, etc. are PCS examples

Where to get spatial data?

- Government at all levels maintains and produces spatial data
- Use Google to find it!
  - Agencies often have their own repositories, or may contribute to larger repositories, like the wonderful NRCS Geospatial Data Gateway.
- Data often comes in zip files (.zip)
  - Always read the metadata! These are text files, .xml files, or dedicated websites that describe the spatial data.
  - There may be important CRS information, or use limitations


Questions?
Specific lingering doubts?